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Supreme Court of the United States

OCTOBER TERM, 1943.

No. [redacted] 3

CORNING GLASS WORKS, EMPIRE MACHINE COMPANY, *et al.*,

Appellants,

vs.

THE UNITED STATES OF AMERICA.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF OHIO, WESTERN DIVISION.

BRIEF FOR CORNING GLASS WORKS, EMPIRE MACHINE COMPANY AND INDIVIDUAL APPELLANTS ASSOCIATED THEREWITH

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Corning Glass Works and Empire Machine Company (hereinafter called Corning and Empire respectively) stand apart from the other corporate appellants in this case, all of whom are connected with the glass *container* industry. Corning is engaged in the manufacture of non-container glassware which is conceded to be an industry separate and distinct from the glass container industry.

Empire, now dissolved, was engaged in the development of automatic machinery for the manufacture of electric light bulbs, a non-container product, from 1909 to 1915. Subsequent to that time it was not active as a machine development company.

The individual appellants are Alexander D. Falck, Amory Houghton, Arthur A. Houghton, Jr., Arthur L. Day, Eugene C. Sullivan, William H. Curtiss and J. L. Peden, all of whom were directors or officers of Corning or Empire. No separate questions of law appear to be raised as to these defendants and the defense made of Corning and Empire in this brief is intended to cover also the individual defendants as directors or officers of those companies.*

The glass container industry was used by the Department of Justice before the Temporary National Economic Committee in December, 1938** to illustrate its position with respect to the effect of patents upon competition.

This suit was brought on December 11, 1939 in the District Court for the Northern District of Ohio, Western Division, against all the principal corporations in the glass *container* industry and individuals associated therewith. It was instituted by the Department as the spearhead of its effort to obtain a judicial readjustment of the boundaries of the patent law and the Sherman Antitrust Act.***

Corning and Empire were joined as parties defendant, primarily because of two agreements for the interchange of

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* Certain of these individual appellants were also directors of Hartford, and have been joined in the Hartford appeal (No. 7), which will be determinative of their liability as Hartford directors.

** Hearings before the TNEC, 75th Cong., 3rd Sess., Part 2, p. 377 *passim.*

*** Department of Justice Release, Dec. 11, 1939. See also the testimony of Mr. Thurman Arnold, Final Report and Recommendations of the TNEC, Sen. Doc. No. 35, 77th Cong., 1st Sess. (1941), at page 115:

> "In the *Glass Container* case, the *Hartford-Empire* case, we simply declined to enter into any decree at all. We thought that there was a case where we were asking them to give up certain restrictions which apparently were approved by the two cases decided by the Supreme Court. We thought there was a case in which we shouldn't ask for a decree because we would have had to go beyond the law."

patent rights: one in 1916 between Empire and Hartford-Fairmont Company (hereinafter called Hartford-Fairmont), predecessor of the principal defendant, Hartford-Empire Company (hereinafter called Hartford), the other in 1922 between Corning and Hartford; and because of the consolidation of assets of Empire and Hartford-Fairmont in 1922 to form Hartford.

The legality of the two license agreements and the consolidation is discussed at some length in this brief. It is vital, however, that this discussion not obscure the fact that a determination that they were illegal by no means supports the application of the major part of the judgment to Corning or Empire.

As this Court is apprised by the briefs of the container appellants, the judgment of the District Court, handed down on October 8, 1942, is the broadest and most drastic in the entire history of anti-trust litigation. It provides for the compulsory royalty-free licensing of all glassware machinery patents held by all the defendants on October 8, 1942; the compulsory licensing at a "reasonable royalty" of all glassware machinery patents issued to any of the defendants on applications filed after that date; and for the rigorous regulation of the future business of all of the defendants.

The reason given by the District Court (Opinion, p. 151) for such drastic provisions was that there had been an illegal aggregation of patents in Hartford and Owens-Illinois Glass Company which resulted in an illegal domination of the *glass container industry,* and that the relief was necessary in order to free it from the effects of such control. The same provisions, however, were made equally applicable to Corning and Empire in the non-container industry.

The asserted control over the container industry by Hartford and Owens-Illinois Glass Company is no warrant for blanketing Corning and Empire under the judgment. Corning and Empire never developed any machinery for the glass container field, and no invention of Corning was ever used by Hartford in that field. The rights licensed by Corning and Empire to Hartford—primarily glass formulae and by-product uses of specialized non-container machinery inventions—played no part in the alleged ultimate achievement of dominance by Hartford in the glass container machinery business.

The indiscriminate writing of Corning and Empire into the provisions of the judgment is error of the gravest possible consequence.

Opinion Below

The opinion of the District Court (Opinion volume, pp. 1-160) is reported in 46 F. Supp. 541.

Jurisdiction

The judgment of the District Court (R. X-7653) was entered on October 8, 1942. The petition for direct appeal to this Court was filed and allowed on December 3, 1942 (R. X-7833).

The jurisdiction of this Court is invoked under Section 2 of the Expediting Act of February 11, 1903, as amended (32 Stat. 823, 36 Stat. 1157) and under Section 238 of the Judicial Code, as amended (36 Stat. 1157, 38 Stat. 804, 43 Stat. 938). This Court noted probable jurisdiction on March 1, 1943 (R. XXVIII-16532).

Statutes Involved

The pertinent provisions of the Constitution and of the statutes relied upon are printed in Appendix A.

Statement

The container and the non-container glass industries

There are three separate and distinct glass industries, namely: flat glass, glass containers, and so-called specialty or non-container glassware (Stip., Ex. 1568, R. XI-8037).* Flat glass is not involved in this case.

The container industry is not in competition with the non-container industry. The two industries differ, not only in their markets, but also in the history and degree of their mechanization resulting from the difference in the compositions of glass used and the products made.

The glass container industry is characterized by considerable similarity of product and of the composition of the glass used, namely, lime glass. Commercial lime glass of today, used in the manufacture of bottles, jars, prescription ware and other types of containers, differs little in composition from that used for generations.

The manufacture of glass containers was first made fully automatic by M. J. Owens in 1903 (Finding 91, R. X-7295). The Owens suction process of manufacture was in part supplanted in later years by the Hartford suspended charge feeding process (Finding 27, R. X-7283), now widely used.

The non-container industry, on the other hand, is characterized by the great dissimilarity of its products

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* A table showing the record page on which each of the exhibits cited herein was offered in evidence is set forth in Appendix B to this brief.

(Stip., Ex. 1568, R. XI-8037) and, in the case of Corning, by the use of special and more expensive glass compositions (R. III-1681). This industry is not wholly mechanized. Some non-container ware is made by hand (R. II-1470); other on machines specially designed for the purpose and having no applicability to the making of containers, such as machines for the drawing of tubing and the blowing of bulbs (R. VIII-6032); and some by means of machinery used in the container industry, but specially adapted to non-container use.

Corning Glass Works

Corning has never engaged in the manufacture of containers (Opinion, p. 5; R. III-1682).*

During the period with which this suit is concerned, all of Corning's products were made from special compositions of glass, none from ordinary lime glass (R. VIII-5588, 5593).

The predecessors of Corning made specialty non-container glassware as early as 1876. One of Corning's early contributions to the art was the making of the glass bulb for Thomas Edison's first incandescent lamp in that year (R. VII-5494).

Early in this century, Corning launched one of the first large-scale organized research programs in American industry (R. VI-4664). It retained the services of two outstanding scientists to work on glass compositions: Dr. Arthur L. Day of the Carnegie Institution of Washington and Dr. Eugene C. Sullivan of the Department of Chemistry of the U. S. Geological Survey (R. VII-5486, VIII-5582). They organized the greatest glass research laboratory in the United States, probably in the world (Ex. H-5004, R. XXIV-14686; R. II-1426, VI-4664). This laboratory employs 180 scientists and technicians (R. VIII-5584).

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* Corning has made some blown tumblers. These are classified as non-container ware (Stip., Ex. 1568, R. XI-8038).

Corning's pioneering research in glasses involved fifteen to twenty thousand experimental glass melts. By 1920 such extraordinary control over the physical properties of the material had been achieved as to permit the manufacture of glasses having the following range of characteristics:

—Specific gravities ranging from that of aluminum to gray cast iron;

—Crushing strength greater than cast iron;

—Hardness greater than quartz;

—Brilliancy half-way between that of ordinary glass and that of the diamond;

—Thermal expansion approaching that of metallic copper, on the one hand, and that of quartz glass, on the other;

—X-ray absorption up to ⅓ of the power of a sheet of lead of the same thickness;

—Opaque to ultra violet or infra red rays while transparent to visible light, and the reverse;

—Lead-free and potash-free glass formulae;

—Glasses for sealing to copper, iron, tungsten and other metals in wire or sheet form (Ex. H-5004, Appendix A, R., folios 62074-81).*

A special glass was developed by Corning for electric light bulbs. This glass did not contain lead or potash, the supply of which was cut off during the last war, and was capable of being used in a continuous melt tank (R. VIII-5587-8).

In 1915, after long experimentation, Corning's research laboratory produced a new boro-silicate heat-resistant glass, which was sold under the Corning trademark "Pyrex" (R. III-1700, VII-5515, 5517). This was an entirely new material in the glass industry. It approached the charac-

* Folio references appearing herein are to portions of the record on appeal not printed, but to which reference can be made pursuant to stipulation between counsel (R. XXVIII-16531).

teristics of pure quartz, in that its coefficient of expansion was so low that it would stand extreme sudden changes of temperature without shattering (R. VII-5488-9, VIII-5591-2). At the same time, unlike quartz, it had a melting temperature which, while considerably higher than that of lime glass, was sufficiently low for commercial processes (R. VII-5102). It also possessed chemical-resistant properties (R. VII-5100) and lower electrical conductivity than ordinary glass (R. VIII-5585).* This new glass, patented in 1919 (R. VII-5100), was used during the last war to free our laboratories of dependence upon German imports of fine laboratory ware (R. VII-5489), and in chemical manufacturing plants, such as nitric acid plants (R. VII-5100).

Its most widespread application was in the manufacture of ovenware, a glass product which had never theretofore existed and which came into direct competition with earthenware, aluminum ware, tin ware and enamel ware (R. VII-5516, VIII-5586).

Heat-resistant glassware is singled out in the complaint as having been illegally monopolized by Corning in violation of the anti-trust laws by reason of the fact that Corning acquired exclusive rights in 1922 to Hartford machinery for the manufacture of heat-resistant ware (Complaint, Pars. 39-52 inclusive, R. I-14-17).

Within the non-container industry, Corning stands out for its extensive pioneer research on special glass formulae and the development of new products made therefrom.

Corning currently uses between 325 and 350 different glass compositions (R. VIII-5593) in the manufacture of hundreds of different products. Among these are bulbs, tubing and cane (solid glass rod), glass parts for electrical devices, railroad signal ware, heat and chemical-resistant

* For convenience, this glass will be referred to herein as heat-resistant glass.

ware, ovenware, scientific glassware, tumblers, and art glass. It also manufactures a wide variety of miscellaneous non-container items composed of glasses having special refractory, X-ray and electrical-conductivity properties (R. VII-5098, VIII-5590).

Empire Machine Company

The problems involved in the use of special glasses having higher melting and working temperatures and problems peculiar to non-container products greatly increased the difficulty of devising or adapting automatic processes to these glasses and articles (R. VII-4869, 5169, 5539). While the glass container industry had been provided with fully automatic machinery in 1903, Corning's bulbs continued to be made exclusively by hand as late as 1913 (R. VII-5510). Indeed, Mr. Amory Houghton, Jr., President of Corning in the early part of this century and sponsor of Corning's outstanding research in glass compositions, did not believe that bulbs could be blown automatically and refused to allow Corning to spend money for that purpose (R. VII-5103, 5496).

A group of men at Corning independently financed work to develop machinery for the automatic manufacture of bulbs (R. VII-5103), and in 1909 organized Empire to carry on this work (R. VII-5496-8). Empire developed a series of bulb-forming machines,* covered by patent applications, two of which were commercially successful (R. VII-4857-62).

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* Container ware is formed in a relatively simple iron mold and retains marks where the two halves of the mold meet. On the other hand, certain types of ware, including bulbs, require a smooth, seamless finish, which is attained by lining the mold with a paste and rotating the glass or the mold while the glass is blown. The heat of the molten glass creates a cushion of steam between the glass and the lining of the mold so that the mold does not come into contact with the glass, producing a smooth surface. Ware so produced is thus known as paste-mold ware, in contra-distinction to iron-mold container ware (R. VIII-6030-1).

One of these, the Type "E" machine, was semi-automatic in that it was fed by hand (R. VII-4859). The later, Type "F" machine was then purely experimental, since it was designed for use with an automatic feeder which Empire did not have (R. VII-4861-3). Patent applications owned by Empire and filed in the name of its inventor, Chamberlin, disclosed certain aspects of an automatic feeder, but Empire never succeeded in developing a workable feeder (R. VI-4349).

The "E" bulb machine was adopted on a large scale by Corning and other licensees of Empire (R. VII-4860). Empire thus had a substantial royalty income. In 1915, before its sponsors had ever heard of Hartford-Fairmont (R. V-3816), Empire retired as a development company and its staff of three engineers left its employ (R. VII-5514).

The 1916 Agreement

Early in 1916 the Patent Office declared several interferences between the applications of Empire's inventor, Chamberlin, and those of Peiler, a Hartford-Fairmont inventor (Ex. 973, R. XI-8027; R. V-3815). The conflict dealt with certain features of the gob type of feeder (R. V-3815-17). Through these interferences Empire first learned that Hartford-Fairmont had built a glass-*feeding* machine for the manufacture of containers which was actually in operation. Empire's representative saw Hartford-Fairmont's new machine and reported that it gave promise of feeding the experimental "F" machine, which had never been used commercially for lack of a feeder, and for use in manufacturing Corning's new heat-resistant glass (Ex. H-5223, R. XXIV-14894).

Hartford-Fairmont's feeder, known as the "paddle" feeder, incorporated inventions common to both companies' applications, as well as other Hartford-Fairmont inventions (R. V-3815-17). Empire was advised by its patent counsel that the probable result of the interferences would be to split the rights to use the inventions involved and that neither company would be able to use its inventions without infringing the claims of the other (Ex. H-5223, R. XXIV-14894).

Hartford-Fairmont was engaged in the development of automatic machinery (Opinion, p. 5). Its interest was in the container industry; it had done no work on designing machinery for use with special glasses or on the complex problems of blowing paste-mold ware; and had no projects for the development of machinery in this field (R. II-1413, VI-4350). While it had already formulated a plan of leasing and licensing its machinery in the container industry (R. II-1406), it as yet had no licensees and was looking for business in that field (Ex. H-5750, R. XXVII-15436). Hartford-Fairmont was interested in making certain it could continue its licensing business free of Empire's conflicting claims (R. II-1413).

Empire, on the other hand, was interested in obtaining a license under the paddle feeder machine for the purely non-container ware purposes in which Corning and other licensees of Empire were interested, and as an essential adjunct to its experimental "F" machine (R. VII-4866, 4869, 5522-3).

Since the two companies were interested in separate, non-competing industries, each wanted and was satisfied to have the use of the inventions in question in its own industry. Furthermore, Empire desired to obtain the use of the paddle feeder for the fields in which Corning had been doing its pioneering research.

The matter was resolved by an agreement dated June 30, 1916 (Ex. 1, R. XII-8598) whereby Hartford-Fairmont gave Empire an exclusive license under any patents that might issue to Hartford-Fairmont covering any features disclosed in the conflicting Empire applications, and an exclusive right to the inventions embodied in the paddle feeder for the manufacture of: (a) parts of electric lamps, (b) signal and optical glassware, (c) chemical-resistant and heat-resistant ware, (d) ovenware, and (e) mold-blown electrical ware (Finding 29, R. X-7283).

Empire, on the other hand, gave Hartford-Fairmont an exclusive license under any patents that might issue to Empire covering any features in the conflicting Hartford-Fairmont applications, for the manufacture of containers. Both licenses were free of royalty (Finding 29, R. X-7283).*

In so far as the patent applications in interference were concerned, the effect of the agreement was that—no matter how the interferences might be decided—each party gave the other a "quitclaim" from any future charge of infringement with respect to such disclosures as were embodied in such other party's own application (R. VII-5521).

The applications of Empire and Hartford-Fairmont also became involved in interference proceedings with applications of Steimer (R. V-3819), and they were thus faced with further deadlock on the use of the Hartford feeder in their respective fields (R. II-1414-5). In order to free the paddle feeder from risk of infringing Steimer, Empire and Hartford-Fairmont acquired the Steimer application jointly in 1917—title going to Empire pending such division as might be necessary to protect the respective rights set forth in the 1916 agreement (Finding 37, R. X-7285).

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* The 1916 agreement also provided for certain non-exclusive licenses.

The 1922 Glass Contract and the Formation of Hartford

The efforts of Empire's licensees to adapt the paddle feeder to non-container uses were not commercially successful (R. VII-5528-9).

Meanwhile, in 1918 and 1919, Hartford-Fairmont built improved feeders, which showed greater prospects of being adaptable to the feeding of Empire's "F" machine for bulbs and for feeding heat-resistant glass (Ex. C-5666, R. XXVI-15374; R. VII-4870). The new feeders included inventions incorporated in the paddle feeder, and additional inventions not embodied in the paddle feeder (R. V-3875-6, VII-5529, VIII-5573-5).

Hartford-Fairmont was precluded from licensing the improved feeders for the manufacture of non-container ware by the fact that these improved feeders incorporated inventions already licensed by it to Empire (Finding 35, R. X-7284-5; Ex. H-5393, R. XXV-15087). On the other hand, Empire could not license the improved feeders in the non-container field, nor could Corning use them in that field, because they had no rights to the new inventions incorporated in the improved feeders (R. VII-5529). All three companies were thus faced with an impasse with respect to the use of the new feeders in the non-container industry.

By 1920 Hartford-Fairmont had accumulated losses of about $500,000 (R. II-1426) and its sponsors were discouraged (R. II-1422-4). It was badly in need of large additional funds with which to pursue its development work and the issuance of its patents. It had considered seeking aid from other sources and even selling out to Owens (Ex. 7, R. XVIII-12371; R. I-700).

Empire was the recipient of a substantial royalty income from its "E" machines and was a likely source of the

needed capital (R. II-1425). Accordingly, negotiations were opened looking to a consolidation of the assets of Hartford-Fairmont and Empire in a new company.

Corning sought to obtain from the proposed new company such rights as would give it the benefit in the non-container field of Hartford-Fairmont's new inventions (R. VII-4872, 5542). Corning had an outstanding reputation for the development of glass compositions, and Mr. A. B. Houghton impressed Hartford-Fairmont with the possibilities of using Corning's new glass formulae in the container industry (Ex. 7, R. XVIII-12371; R. II-1426-7). An agreement in principle was concluded in 1920 and Empire advanced considerable sums to Hartford-Fairmont two years before the formal execution of the papers in 1922 (Ex. 676, R. XX-13348; Ex. C-5048, R. XXIV-14742; R. III-1759-60).

The new company, Hartford, formed in 1922 pursuant to the terms of the "Formation Agreement" (Ex. 16, R. XVII-11943), received all of the assets of Hartford-Fairmont and the patents and patent applications of Empire, subject to outstanding licenses. Empire also agreed to pay the new company a substantial part of its income, amounting to $80,000-$100,000 a year (R. II-1433). In return, Empire received 40.5% of the authorized stock of Hartford (R. II-1433).*

Under the terms of an agreement designated by the District Court as the "Glass Contract", which was executed contemporaneously with the Formation Agreement, Hartford issued to Corning an exclusive license under its inventions for approximately the same uses as Empire had

* Under the Formation Agreement Empire was to receive 45% of the stock. It was further agreed that each of the parties would return 10% of the total received to the treasury for employees of the new company (R. II-1433). At the time Empire was dissolved in January, 1941 it held 43.1% of Hartford's outstanding common stock (Finding 50, R. X-7288).

been licensed under the 1916 agreement (Opinion, p. 10). Corning issued to Hartford an exclusive license under its inventions for the manufacture of containers.*

Corning retained the right to use its own inventions in all fields, including containers. Royalties were to be paid by Corning for the use of inventions that had not been included in the 1916 agreement (Finding 53, R. X-7289; Ex. 19, R. XII-8607).

The effect of the 1922 Glass Contract

The space devoted in this statement to sketching the history of the 1916 agreement, the 1922 Glass Contract and the formation of Hartford is occasioned by the significance attached to these agreements by the Government and the District Court (Findings 29-37, 46-55, 64, 72, R. X-7283-92; Concl. 52, 53, R. X-7413; Opinion, pp. 9-10, 18-26), but is wholly out of proportion to their industrial significance either to Hartford and the container industry or to Corning.

Corning's license to Hartford of machinery and glass rights had, as a practical matter, no perceptible effect in the field of container manufacture. Hartford found that Corning's glass formulae used materials which were too expensive for containers (R. II-1434, VI-4656). None of them was so used, and they can therefore be disregarded (R. II-1434). Despite its efforts to do so, Hartford never succeeded in adapting any Corning or Empire machine to the manufacture of containers (R. VII-5545, 4786).

The Hartford feeder and ancillary equipment developed by Hartford for the manufacture of bottles and other con-

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* The Glass Contract also contained non-exclusive licenses in some fields of non-container glassware.

tainer ware proved a great success in the *container* industry (R. I-641). But the Hartford machines are not shown to have been useful in the manufacture of more than a few of Corning's many non-container products.

The machinery developed by Hartford was used by Corning in the manufacture of heat-resistant glassware, such as ovenware, and for a limited period of time in the production of bulbs. It does not appear to have been used extensively by Corning in the manufacture of its other numerous and varied products.

In the production of bulbs Corning used the "F" machine with the Hartford feeder only to a minor extent.*

In 1926 Corning started production on an entirely new bulb-making machine—the "399" or "ribbon" machine developed by Corning itself (Ex. C-5656, R. XXVI-15360). This revolutionary machine is capable of producing 600 bulbs a minute—in excess of 800,000 bulbs a day (R. VII-5118).** This invention ended the commercial usefulness of Empire's "F" machine with the Hartford feeder in the production of bulbs (R. VII-5539).

In the field of heat-resistant glassware, the adaptation of Hartford's feeder presented very serious technical problems for Corning (R. VII-5528-9).

Three patents were issued by the Patent Office to Hartford inventors during the period from 1922 to 1940 which,

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* In 1921 Corning's bulb production using the Hartford feeder was 3% of its total bulb production, and the peak of production of this machine was reached in 1926 when 33% of all the bulbs produced were made on the "F" machine with a Hartford feeder (Ex. C-5656, R. XXVI-15360).

** Some idea of the efficiency of this machine may be gained from comparing the production of a single machine—amounting to approximately 292,000,000 bulbs a year, if run continuously—with the total United States production of incandescent lamps for 1938 of 738,700,000. (U. S. Tariff Comm. Report No. 133, 2d Series—Incandescent Electric Lamps—pp. 30-31, Tables 7 & 8.)

though never incorporated by Hartford in a commercial machine for the manufacture of containers (R. VII-4808-9, VI-4453), had a real or asserted bearing on machines used by Corning for non-container ware.

The first of these patents was the Peiler punty patent, which issued in 1926. Although the claims of this patent did not cover a complete tube-drawing machine (R. III-1704), it read on a feature of the Danner machine, developed by Libbey Glass Company, which was being used at that time by Corning and others not party to this case for the manufacture of tubing (R. III-1708).*

While Corning was entitled, under the 1922 Glass Contract, to use the inventions disclosed by the Peiler punty patent for the manufacture of tubing, such use was subject to royalty payments to Hartford, and Corning would thus have been subjected to double royalties for its use of the Danner machine (R. III-1705-6). After negotiation, the Danner licensees paid Hartford $350,000 for tubing rights under the patent, this sum representing paid-up royalties for the life of the patent (R. III-1707-8).

In the second case a patent known as the Howard autoblow patent, which also issued in 1926, was claimed by Hartford to read on Corning's very valuable ribbon machine (R. VII-4784-5). Corning, however, was advised by counsel that the ribbon machine did not infringe the patent (Exs. C-5530, C-5532, R. XXVI-15281-9). After considerable negotiation, Hartford in effect abandoned its contentions—the settlement taking the form of an amendment to

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* The patent on the Danner machine, originally owned by Libbey Glass Company (R. III-1708), issued in 1917. Rights to use the Danner were held by General Electric Company, Kimble Glass Company, Libbey Glass Manufacturing Company and Corning (Finding 65, R. X-7291).

the 1922 Glass Contract which gave Corning a royalty-free license under certain of the claims in the Howard patent (Finding 76, R. X-7292). Hartford never succeeded in building a commercial machine for containers under the Howard auto-blow patent (R. VII-4808-9).

The third case was one where a patent issued to Hartford in 1935—the Smith re-issue—covered one feature of a machine developed by Corning, known as the turret chain machine (Finding 79, R. X-7293).

In 1940, in connection with the effort of Corning and Empire to settle the case before trial by the cancellation of the 1916 agreement and the 1922 Glass Contract, these three patents were transferred to Corning (Stip., Ex. C-6119, R. XII-8569). The Peiler punty patent expired in February, 1943 (Finding 68, R. X-7291) and the Howard auto-blow patent in July, 1943 (Finding 73, R. X-7292). The Smith re-issue patent will expire January 22, 1952 (Finding 79, R. X-7293), six years before the patents covering Corning's turret chain machine (R. VIII-6026).

Scope of the Government's suit

The Government's complaint addresses itself primarily to the container industry and the various aspects of Hartford's acquisition of patents and patent rights and its policy of issuing limited licenses to a limited number of glass *container* manufacturers (Complaint, Pars. 53-218, R. I-17-65). It recognizes the distinction between the container and non-container divisions of the industry and states that they were commercially independent (Complaint, Par. 29, R. I-9).

The attack upon Corning set forth in the complaint is directed primarily at the 1916 agreement, the 1922 Glass Contract and Formation Agreement and, in addition thereto, at specific transactions relating to heat-resistant

ware—particularly the refusal of Hartford to license anyone besides its exclusive licensee, Corning, to use its machinery in the manufacture of such ware (Complaint, Pars. 39-52, R. I-14-17). The complaint also broadly charged all the defendants with conspiring to monopolize and restrain trade in patents covering machinery for the production of glassware generally, in the machinery itself, and in glassware (Complaint, Par. 34, R. I-12).

Cancellation of the 1916 Agreement and 1922 Glass Contract

A summary of the practices of the defendants complained of and the relief requested was furnished by the Government to the defendants (Ex. H-6113, R. XXVIII-16256-62). This specified as part of the relief requested "the cancellation of existing agreements between Corning, Empire Machine and Hartford." Extensive pre-trial conferences were held in open court from September 20, 1940 to February 13, 1941 in an effort to settle the case or narrow the issues.

On the morning of September 20, 1940, at a pre-trial conference and responding to the inquiry by the court as to "what, if anything, has developed since the submission of the summary of practices complained of by the government to the defendants", counsel for Corning and Empire stated to the court that the "purpose of this conference is to endeavor, if possible, to narrow the issues in this case, and out of this welter of allegations as to the use and misuse of patents to narrow the case as far as practicable to the real underlying issues" (Stip., Ex. C-6119, R. XII-8567). He stated that under negotiations then in progress, if Corning were permitted to retain its exclusive rights under three named patents (Peiler punty, Howard autoblow, and Smith re-issue) and the case could be settled

without trial, Corning and Empire would consent to a cancellation of both the 1916 agreement and the 1922 Glass Contract (Stip., Ex. C-6119, R. XII-8567).

Counsel for the Government stated to the court on the same day:

> "After the session this morning counsel for the government conferred at length, until ten minutes to two, with counsel for Hartford and counsel for Corning; and it becomes apparent from that conference that Corning's willingness to cancel the 1916 and 1922 contracts, subject to certain eliminations, will bring about a competitive situation in the entire industry in regard to all phases of the manufacture of glass; not only glass containers, but bulbs and heat resisting ware. I think that that matter can be worked out." (R. I-602)

The eliminations referred to by Government counsel concerned the three patents mentioned above. Upon being informed that these three patents could not be used in the manufacture of glass containers, counsel for the Government had previously stated in the noon hour conference that if such were the fact "it would seem that in connection with any settlement Hartford could transfer those three patents to Corning" (Stip., Ex. C-6119, R. XII-8569). The three patents were transferred to Corning by Hartford (Ex. H-5029, R. XIII-9539), and the 1916 and 1922 agreements were cancelled by an agreement dated September 23, 1940 (Ex. H-5030, R. XIII-9540).*

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* No claim is made that the cancellation agreement was submitted to the Government or the District Court in advance for their approval. The contracts were cancelled without awaiting any settlement, in the hope that such step would *pro tanto* serve to meet the Government's pre-trial specification of relief desired. These cancellations were reported to the court generally in the supplemental answer filed by Corning and Empire on October 15, 1940, though the considerations paid to Corning were not there set forth (R. I-429). See discussion, page 62, *infra*.

Subsequently, before the termination of the settlement negotiations, counsel for the Government took the position that Corning should assign the three patents to a proposed Glass Institute. After a request by Government counsel that Corning grant unrestricted, non-exclusive licenses to the Institute under the three patents, Corning agreed to give to the proposed Institute a non-exclusive and assignable license thereunder for all fields of ware other than bulbs, tubing, cane, and rod (Stip., Ex. C-6119, R. XII-8570).

The Government also desired certain injunctive relief including the divestiture of the Hartford stock held by Empire (Ex. H-6113, R. XXVIII-16262; I-602). Empire was dissolved (Ex. C-5653, R. XXVI-15357) and its stockholdings in Hartford distributed to the Empire stockholders.

The settlement negotiations thereafter failed—no Institute was formed, and the case proceeded to trial on March 3, 1941.

The Decision of the District Court

The opinion of the District Court was handed down on August 25, 1942. It upheld almost in their entirety the Government's charges of violations of the Sherman Act.

In discussing arguments made by the defendants at the close of the case, to the effect that the action voluntarily taken by them in negotiating a settlement had made the issues of the case irrevocably moot, the District Court made the following statement:

> "There has been a violation of the anti-trust laws through an illegal aggregation of patents upon the part of the *Hartford* and *Owens* companies; there has been an illegal combination resulting in an unreasonable restraint of trade in the *glass container industry* through the control of machinery used in the manufacture of glass; and there has been a dom-

> ination and control of the *glass container industry* that has resulted in an undue and unreasonable restraint of trade. Until the court is satisfied that the illegal effects of those acts and things done have been dispelled and that *the industry* is freed from the domination and control of the defendants, and until the court is satisfied that these illegal acts and practices will not be resumed by the parties once this suit upon the part of the Government has been dismissed, it has a distinct duty to the public to look through the steps taken by the defendants during the past two and one-half years and during the pendency of this suit, and make such orders as the court deems are necessary and sufficient to remove the effects of the violations of the anti-trust laws." (p. 151)*

Stating that it was attempting to avoid the dissolution of Hartford, the District Court appointed a receiver for Hartford as an interim remedy. When it came to the permanent steps to be taken, the court addressed itself to the Hartford licensing and lease system, as follows:

> "The most important question is with respect to the licensing and lease system now used by Hartford. The court believes that this is the greatest abuse. *It is through the licensing and lease system that Hartford retains control over and dominates the industry.* * * * It is the opinion of the court that this entire system must be abolished." (p. 158)

In the following paragraph the District Court went on to apply the remedy of the compulsory royalty-free licensing of patents in the following language:

> "Any future system for the distribution of automatic machinery must be put on a basis of outright sale at reasonable prices. This is to include machines

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* All italics in this and subsequent quotations in this brief are added, unless otherwise noted.

made under *all of* the patents and applications for patents owned or controlled by *all* the defendants herein and involved in this suit. In addition, *all the defendants shall be required to license anyone, royalty free, in the manufacture of machines embodying these patent rights. This will include all patent rights relating to the suction machine, feeders, forming machines and lehrs.*" (pp. 158-9)

The judgment of the District Court made this broad proposition applicable in its entirety to Corning machines in its many fields of manufacture, although it was not shown that Corning had ever been in the business of distributing machinery or that Corning patents were used in Hartford machines.

The Judgment of the District Court

The District Court disregarded the fact that no control over the non-container industry through an aggregation of patents or an alleged illegal license and lease system, such as is discussed in its opinion with regard to the *container* industry, was set forth in the evidence with respect to the non-container defendants, Corning and Empire. Nevertheless the court adjudicated Corning and Empire a monopoly, as well as Hartford,* and made the provisions

* In Section 4 of the judgment Corning and Empire are included with the container defendants and found to have violated Sections 1 and 2 of the Sherman Act with regard to patents and machinery used in the manufacture of glassware. Glassware is defined in Section 1(C) as including both container and non-container ware. In Section 5, Corning, Hartford and Empire are found to have similarly violated Sections 1 and 2 of the Sherman Act with respect to the manufacture of specified non-container ware. Both paragraphs include an adjudication of monopoly, as well as attempting, combining and conspiring to monopolize and contracting, combining and conspiring to restrain trade. Section 3 of the judgment is a general adjudication of the unspecified violation of Sections 1 and 2 of the Sherman Act by all the defendants. The adjudications in Sections 6, 7 and 8 of monopolizing container ware do not include either Corning or Empire.

of its decree indiscriminately applicable to Corning and Empire, as well as to the container defendants.

Corning's great invention, the "ribbon" machine for making bulbs, together with all other patents on machines and methods for the manufacture of non-container glassware as broadly defined in the judgment, was subjected to outright expropriation, despite the fact that in the course of trial counsel for the Government stated:

> "* * * We have never claimed any combination of patents involving the ribbon machine, as far as I know." (R. VII-5105)

Similarly, the decree provided for the compulsory licensing of all *future* machine and method patents at a royalty to be approved by the District Court.

Specification of Errors

As their specification of errors these appellants adopt and rely upon the assignments of error set out in their appeal papers (R. X-7808).

Summary of Argument

I.

The Government's case against Corning and Empire, and the individual defendants associated with them, rests basically on the 1916 agreement, the Formation Agreement, and the 1922 Glass Contract. These agreements did not violate the anti-trust laws.

The companies concerned were not in competition either in 1916 or 1922. Empire was formed to develop an automatic bulb-blowing machine; in 1915 it ceased its development work. Hartford-Fairmont was engaged in the development of machinery for the manufacture of glass con-

tainers. Corning was a manufacturer of non-container glassware, and its machine development work was an adjunct to that business.

The 1916 agreement was a mere settlement of conflicting claims resulting from a patent interference—accompanied by the grant by Hartford-Fairmont to Empire of an exclusive license under the inventions contained in the paddle feeder, for the manufacture of non-container ware. The 1922 Formation Agreement effected a partial consolidation of two non-competing companies, Hartford-Fairmont and Empire. Both agreements were valid under the anti-trust laws.

The 1922 Glass Contract was likewise valid. Two concerns engaged in industrial research, whose businesses do not substantially compete, may agree to exchange exclusive patent licenses, limited to their respective fields of business. The legality *per se* of exclusive and limited patent licenses has long been established.

The 1922 Glass Contract did not divide a market between competitors. The two companies were engaged in distinct fields of development and, while each wanted the exclusive use of its inventions in its own field, neither was interested in pursuing the development of its inventions outside its own field. It was in the interest of industrial progress for each concern to let the other take over its inventions for such use as might be made of them in the other's field.

The Department of Justice objects to the Glass Contract because Corning's exclusive right to use Hartford's inventions in the manufacture of non-container glassware gave it some advantage over others in that field. This is a normal result of an exclusive license. If the Department of Justice wishes to outlaw limited or exclusive licenses, its proper forum is not the courts but Congress, and Congress has refused to modify the patent law in this regard.

II.

Corning was found by the District Court to have a monopolistic position in the manufacture of a number of types of non-container ware. The court apparently assumed that the exclusive rights to use the Hartford machines, granted to Corning in the non-container field, automatically gave Corning a monopolistic and dominating position with respect to the non-container ware itself. It has not been shown that a monopoly in non-container glassware was created in Corning by the Glass Contract. Corning had only a non-exclusive license under the Glass Contract in certain fields. In the exclusive fields, the record does not show that Corning used only Hartford machines, or that the ware could only be produced on Hartford machines.

III.

The Government charges all the defendants with "conspiracy". There were legitimate business reasons for entering into the 1916 and 1922 agreements. If, as we urge, the agreements were legal, an intent to bring about such natural and lawful consequences as are inherent in the enjoyment of patent rights cannot constitute a "conspiracy". If the Government charges some separate understanding for the elimination of competition, its charge is not supported by the record.

The post-1922 patent acquisitions or settlements by Hartford were principally important in the container field. While certain Hartford directors who were consulted on some of these transactions were also directors of Empire and Corning, it is not shown that they were acting other than as stockholders and directors of Hartford.

Corning did not exercise control over Hartford. The two concerns had some common directors, various individuals held stock both in Corning and Empire, and the latter held a large minority interest in Hartford, but Empire expressly refused stock control over Hartford.

IV.

The District Court entered a judgment that has no precedent in the field of anti-trust litigation and which blankets all the defendants under its extreme and punitive provisions. The requirement that Corning sell glassware embodying patents—or any other product embodying patents—to all customers at identical prices and terms—is unjustified. There was no charge and no showing of discrimination in the sale of glassware—and there is no legal basis for such a requirement. The requirement that Corning issue royalty-free licenses under existing glassware machinery patents, as broadly defined in the judgment, and the requirement for compulsory licensing of future patents of that character at "reasonable" royalties are also without justification.

The opinion of the District Court indicates that these provisions are directed at the alleged illegal aggregation of patents coupled with the license and lease system, found by the court to exist in the container industry. The indiscriminate application of the judgment to Corning, the sole non-container manufacturer in the case, and to machines and glassware in no way involved in this case, brings about a result shockingly inappropriate and unjust, irrespective of the legality of the now cancelled agreements, entered into in 1916 and 1922.

ARGUMENT

POINT I.

The 1916 and 1922 Agreements did not violate the Anti-trust Laws.

The Government's case against Corning and Empire is primarily concerned with three transactions:

(1) The 1916 agreement (Ex. 1, R. XII-8598);

(2) The 1922 Formation Agreement (Ex. 16, R. XVII-11943); and

(3) The 1922 Glass Contract (Ex. 19, R. XII-8607).

The District Court concluded that each of these agreements was in violation of the Sherman Act (Conclusions 52, 53, R. X-7413), and most of the findings of fact naming Corning and Empire relate to these agreements.* The circumstances leading up to the agreements and their terms have been set forth in the statement, *supra*, pp. 10-15, and will not be repeated here.

It is our position that these agreements in no way violated the anti-trust laws and that the Government has rested its argument of their illegality primarily upon the normal and natural incidents of limited and exclusive licenses.

A. Hartford-Fairmont and Empire were not in competition with each other in 1916 or 1922.

The District Court made no direct finding that Empire was at any time in competition with Hartford-Fairmont. In so far as its evidentiary findings suggest indirectly that

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* Findings 28-37 (R. X-7283-5), 46-55 (R. X-7287-9), 57 (R. X-7290), 59-62 (R. X-7290-1), 64 (R. X-7291), 67 (R. X-7291), 72 (R. X-7292), 75-76 (R. X-7292).

the two were in competition, they are not supported by the record.

The facts are, as we have already pointed out, that Empire was formed to develop an automatic bulb-blowing machine (p. 9, *supra*). It never developed a working feeder (p. 10, *supra*). In 1915 it ceased all development work and its staff of engineers was disbanded (p. 10, *supra*). It never thereafter filed a patent application (R. VII-5515). Empire was not a manufacturing company and it did not have a machine capable of manufacturing containers (R. V-3816).

Hartford-Fairmont, on the other hand, was formed for and was engaged in the development of automatic machinery—particularly feeders—for the container industry. It had no interest in 1916 in developing bulb-blowing machines or any other special machinery for the non-container industry (p. 11, *supra*).

The two companies were thus respectively seeking to develop machinery for use in entirely different fields—the glass container field on the one hand, and the non-container field on the other. That these fields are "commercially independent" of each other was recognized by the Government in its complaint (R. I-9). The two fields likewise have always been largely separate in their technical problems. The "E" and "F" machines, which were Empire's main concern, were never adapted to any container use (R. V-3816, VII-4867). While the Hartford feeder was eventually made useful in the manufacture of bulbs and ovenware in the non-container field, its adaptation required many years of research.

Finding 28 of the District Court (R. X-7283) states that prior to June 30, 1916 Empire had been "engaged in the development and licensing of inventions and machinery intended primarily for blowing glassware" and that Hart-

ford was at that time planning an extensive business of developing and licensing *similar* inventions and machinery. This finding is clearly erroneous. The language quoted is taken from the preamble of the 1922 Formation Agreement. The District Court, however, omits the all-important qualifying words—"known as *paste-mold* glassware"—which follow the quoted language. The agreement recites in addition that Hartford-Fairmont was engaged in the development of machinery for making *iron-mold* glassware and that the two fields were not conflicting (R. XVII-11943).* The finding is directly contrary also to the other evidence above cited.

That there was no existing competition between Empire and Hartford-Fairmont is impliedly conceded by the finding of the District Court that the purpose of the 1916 agreement was to eliminate "impending" competition between the two companies.** This finding likewise is not supported by the record. Contrary to the statement in the opinion of the District Court (pp. 18-19), there was no provision in the agreement that the parties would not compete in each other's fields. Aside from the invention claims which were in interference and which were the subject of the agreement, both Empire and Hartford-Fairmont remained fully free to

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* Paste-mold ware is entirely different from iron-mold ware. The term "paste-mold ware" generally designates non-container ware as distinguished from iron-mold container ware and refers to the difference in method of manufacture of the two types of products (R. VIII-6030).

** The District Court found that "the purpose and effect of the 1916 contract between Hartford and Empire Machine was to eliminate impending competition between Hartford and Corning and Empire Machine, in the glass making machinery business" (Finding 31, R. X-7284). Since Corning was not a party to the 1916 agreement and since it has never been in the glass-making machinery business, the inclusion of Corning in this finding of the court has no basis whatsoever.

develop and license any other inventions in any industry whatever.

When Hartford was formed in 1922, the competitive situation was unchanged. Empire had no plant and no engineering staff. It had not been active as a machine development company since 1915.*

The District Court relies on a statement made by A. B. Houghton (as reported by F. G. Smith of Hartford-Fairmont) during negotiations leading up to the 1922 Formation Agreement, that Empire would start new activities in machine development work if the negotiations fell through (Finding 46, R. X-7287; Ex. 7, R. XVIII-12371). The statement that Houghton is reported to have made has every earmark of trading talk.** But even if it be regarded as a statement of intent, the possibility that Empire could have gathered a new staff of engineers and thus independently invented and developed its own line of feeders and other glass-making machinery capable of competing with Hartford-Fairmont or anyone else, is purely speculative. It cannot be said, merely on the basis of such a statement, that any substantial potential competition was affected by Empire's decision not to come out of retirement. The decision affected only the hypothetical ability of some-

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* The record does not support the court's finding (No. 47, R. X-7287) that Empire commenced independent development on a new glass-feeding device in 1920. F. G. Smith, of Hartford-Fairmont, did state in a letter to Monongah Glass Company (Ex. 14, R. XVIII-12389) that *Corning* was developing a new feeder. However, when questioned about this statement by counsel for the Government, Dorsey, patent counsel for Corning, testified that so far as he knew, all that had happened was that somebody at Corning had made a minor modification in a Hartford-Fairmont feeder (R. VII-4874).

** The statement appears in a 9-page memorandum reporting on conversations lasting three days, which touched upon every business aspect of the proposed consolidation (Ex. 7, R. XVIII-12371).

one to *invent* a new system of glass-working machinery which would have been as good as, or better than, Hartford-Fairmont's.

B. Hartford and Corning were not in competition.

Corning has always been engaged primarily in the manufacture and sale of non-container glass products (Opinion, p. 5), and the machine development work which it has done has been an adjunct to that business. The record does not show that it has ever engaged in the business of manufacturing and distributing glassware machinery of any kind. Obviously, Corning's business of manufacturing and selling non-container *glass products* is very different from the business of Hartford (and its predecessor, Hartford-Fairmont)—the distribution of container *machinery*.

Here, too, the fact that Corning and Hartford-Fairmont were not in competition with each other in 1922 is indicated by the finding of the District Court (Finding 54, R. X-7289) that: "The purpose of the parties in entering into the formation agreement and glass contract was to eliminate *prospective* competition between Hartford-Fairmont and Corning and Empire Machine in the production and distribution of glass making machinery."

There is no basis for the court's assumption that Corning might have gone into the business of producing and distributing glass-making machinery. In 1922 Corning did not have any patented machines capable of manufacturing containers (R. VII-5545). The mere fact that Corning, a company engaged in the business of manufacturing non-container glassware, might go into the business of producing and distributing glass-making machinery at some time in the future, is something so remote and speculative that it is not the kind of "competition" that should be sufficient

to prevent business men from entering into an agreement to exchange licenses. The kind of competition that the anti-trust laws have in mind is a substantial present competition—or at least a substantial probability of competition—not something that is purely speculative.

The District Court stated in its opinion (p. 25) that one of Hartford's purposes in entering into the 1922 Glass Contract was to eliminate Corning as a manufacturer in the container field. There is not the slightest basis for this assertion. Corning was not manufacturing containers in 1922. The contract in no sense eliminated it as a container manufacturer. Corning retained the right under the contract to use its own machinery inventions for any purpose it saw fit, including the manufacture of containers (Finding 53, R. X-7289). It is true that Corning did not obtain the right to use Hartford inventions in the container field, but it did not surrender any opportunity to make containers that it would otherwise have had.

The District Court also found it significant that the charter of Hartford required the approval of 65% of the common stock or the unanimous vote of the board of directors before the company could, among other things,* engage in the manufacture of glassware for ordinary commercial sale.**

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* (1) Mortgage, pledge, or sell any of the capital stock of Hartford-Fairmont or of Empire; (2) assign or sell any of its patents or patent applications; (3) change its certificate of incorporation; and (4) grant to a single licensee a license covering a major portion of its patents (Ex. 16, R. XVII-11957).

** Finding 55 (R. X-7289):

> "The provision of the formation agreement preventing Hartford from manufacturing glassware without approval of 65% of the stock or the unanimous vote of the Board of Directors was designed to give the Corning interests the power to prevent competition between Hartford and Corning in the production and sale of glassware."

As A. D. Falck, then president of Empire, testified (R. VII-5545-6): the purpose of this provision of the charter was to insure that the new company would devote its energies to machine development work; Empire was contributing a substantial amount of cash and royalty income in the hope of a return over a long term; it did not wish the controlling interests in the new company, the Hartford-Fairmont group, to be free to abandon machine development work and go into the glass-manufacturing business, in which the company had no experience, unless the minority interest consented at some later date.

Empire did not seek or receive majority control of the new company (Ex. 676, R. XX-13351; Ex. C-5049, R. XXIV-14746), but it did not wish to find itself sponsoring a speculative venture into the glass-manufacturing business.

C. The 1916 Agreement and the 1922 Formation Agreement between Empire and Hartford-Fairmont did not violate the anti-trust laws.

Empire and Hartford-Fairmont were so far from being in competition in 1916 that they were unaware of each other's existence until the Patent Office declared interference between their respective applications. They then entered into an agreement that each might use in its own field the inventions disclosed in its own applications. Thereby they settled the Patent Office interference.* "This was a legitimate and desirable result in itself." *Bement* v. *National Harrow Co.*, 186 U. S. 70, 93. See, also, *Virtue* v. *Creamery Package Mfg. Co.*, 227 U. S. 8, 33. It is difficult to see how it raised any anti-trust question at all.

* Besides settling the patent application interference, the 1916 agreement gave Empire the exclusive right to use Hartford's inventions in the paddle feeder in the non-container field. The legal questions raised by this phase of the agreement are covered by our discussion of the 1922 Glass Contract.

So, also, the 1922 Formation Agreement, which substantially merged the assets of Hartford-Fairmont and Empire, presents no legal or policy questions of any great difficulty. As has been shown, in 1922 Empire and Hartford-Fairmont were not interested primarily in the same fields and there was no substantial likelihood of competition between the two. Nor was there competition between the inventions respectively transferred by the two concerns to the new company. The Government conceded below that (R., fol. 13220):

> "There is no suggestion that the purpose of the conspiracy was to acquire competing patents in the sense claimed by the defendants; namely, independent methods of accomplishing the same result."

It would seem too plain to need citation that a merger of non-competing inventions and non-competing companies does not violate the anti-trust laws.

D. The 1922 Glass Contract did not violate the anti-trust laws.

The 1922 Glass Contract between Corning and Hartford had no effect on competition between the principals to the agreement, because there was no competition between them to begin with. Both precedent and public policy indicate that two concerns engaged in industrial research, whose businesses do not substantially compete, may agree to exchange exclusive patent licenses, limited to their respective fields of business.

That exclusive or limited patent licenses are not, *per se*, invalid has long been established. As stated by this Court in *General Talking Pictures Corp.* v. *Western Electric Co.*, 305 U. S. 124, 127:

> "The practice of granting licenses for a restricted use is an old one * * *. So far as appears, its legality has never been questioned."

See also:

Bement v. *National Harrow Company*, 186 U. S. 70, 94;

Virtue v. *Creamery Package Mfg. Company*, 227 U. S. 8, 36-37;

United States v. *General Electric Co.*, 272 U. S. 476, 489.

Moreover, in other cases this Court has gone further than the facts of the present case require. It has upheld the bringing into single ownership of diversely held patent rights, wherever it has concluded that there was no substantial competition between the businesses of the patent holders—this whether there was involved the direct acquisition of patent rights, *United States* v. *United Shoe Machinery Co.*, 247 U. S. 32, or merger of the companies, *United States* v. *Winslow*, 227 U. S. 202, or outright purchase of one of the companies by the other, *International Shoe Co.* v. *Federal Trade Commission*, 280 U. S. 291. In some of those cases differences of opinion existed among the Justices as to whether the patent holders were in substantial competition with each other. But the principle appears clear that, if they are not, a merger of their patent rights does not raise an anti-trust question. Where merger is permissible, it would seem that cross-licensing is valid *a fortiori*.

The court below apparently thought the Glass Contract objectionable in that the licenses exchanged thereunder were limited as to fields of use—that is, Corning received no right to use Hartford patents in the manufacture of glass containers, and Hartford received no right to use Corning patents in the non-container field. We submit, however, that there is every reason for upholding arrangements of this type.

Corning and Hartford were engaged in distinct fields of development, and neither wished to pursue the adaptation or development of its inventions outside its own field. Such use as might be made in other fields of those inventions was a sort of by-product of industrial research, and each company was willing to part with that by-product. It was in the interest of industrial progress for each concern to let the other take over its inventions for such use as might be made of them in the other's field.

The limited cross-licenses exchanged by Corning and Hartford promoted the utilization of their patents in all fields. They did not in any way divide or eliminate any pre-existing competition. By limiting fields of use, the companies merely refused to create competition with themselves by use of their own inventions. Unless limitations as to fields of use are permissible, the result will usually be that inventors will retain to themselves exclusive use in all fields. That will not promote competition and it will inhibit the full use of inventions.

These considerations are well recognized. Thus, the Commissioner of Patents has stated that:

> "The granting of licenses containing restrictions as to use is unually [sic] well within the public interest, particularly with respect to inventions which have applications in different fields."*

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* Statement of Conway P. Coe before the T. N. E. C., Part 31-A, p. 18477. The Commissioner elaborated:

> "As an example, there may be mentioned the case of an inventor who developed a particular type of internal combustion engine after a great deal of experimental and development work. His company further developed the invention for use in stationary internal combustion engines which was their particular field. As soon as the interested public became aware of the value of the invention, a motor car company applied for and obtained a license to manufacture

See also Folk, Patent License Conditions, 22 Journal of Patent Office Society (1940), p. 187; The American Patent System, Report of The National Patent Planning Commission (1943), p. 2.

If the cross-licensing of by-product inventions between different industries is forbidden, not only will the full use of inventions be hampered, but the whole field of industrial research and invention will be made considerably less attractive. Vague and unpredictable legal pitfalls would serve only to discourage by-product licensing and delay advances in the art.

The Government and the court below object also to the exclusive feature of the licenses issued under the Glass Contract. Corning used the Hartford feeder, particularly in the manufacture of ovenware from Corning's patented glass compositions. And Corning several times refused to waive its exclusive license for the use of the feeder, both before and after the expiration of its composition patent. The court below made extensive findings on these refusals (Findings 59, 60, 61, 62, 63, 64, R. X-7290-1; Opinion, p. 25), and concluded (Finding 62, R. X-7291) that by enforcement of the 1922 Glass Contract Corning had attained "a monopolistic and dominating position" "with respect to the manu-

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engines under the patent, the license being confined to automobile engines. A motorcycle company then applied for and obtained a license in the field of motorcycle engines. Another company, builders of marine motors, applied for and secured a license for using the invention in the marine motor field; many other special fields were developed and numerous separate licenses in those fields were granted. If nothing but a general license could have been issued by the original inventor and his company these various fields of use might have had to wait until the expiration of the patent before the benefits of the invention could be fully utilized, because the company would have been unwilling to have others enter its specific field in which it was manufacturing under the patent."

facture and distribution of heat-resistant and chemical-resistant ware, ovenware, tubing and cane and bulbs".*

As shown in Point II of this argument, this finding greatly exaggerates the utility to Corning of the Hartford feeder, and paints a wholly false picture of competitive conditions in the non-container industry. But conceding, for the moment, that Corning received substantial advantage from its exclusive use of the Hartford feeder in the making of glass ovenware after the expiration of its product patents, that was but a normal incident of an exclusive license, and does not show a violation of the anti-trust laws.

The validity of exclusive licenses has long been established (cases *supra*, pp. 35-36).

There are, moreover, sound reasons for upholding the use of such licenses. Suppose for instance that Corning had been given only non-exclusive rights to Hartford's feeder in the non-container field. Certainly Corning would have had less inducement to devote the necessary years of research to perfecting and adapting that feeder to the use of non-container glasses, if the benefits of the discoveries would have been immediately available to its competitors. Inventions in one field can ordinarily be made use of in another only after extensive further work, for which an exclusive license is a needed incentive.

It is the policy of the patent law to grant a monopoly for a limited number of years on new inventions as an incentive to invention. The extent of the monopoly is in no way increased if the patent holder, instead of exploiting it solely himself, grants an exclusive license to another.

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* These specific findings, when compared with the vague assertions of potential competition between Corning and Hartford, show very plainly that what the Government is really concerned about is the advantage Corning secured over its competitors through its exclusive license on the Hartford feeder.

POINT II.

The 1916 and 1922 Agreements did not establish a monopolistic position in non-container ware in Corning.

We have already demonstrated in Point I that there was nothing illegal in the exclusive limited license granted Corning by Hartford in 1922.

The court below attributed great significance to the fact that under this license Corning automatically received power to exclude all others from the use of Hartford patents in all fields of ware as to which the license was exclusive. The court assumed that Corning thereby in effect acquired a monopoly of non-container ware. We have already pointed out that, had that been true, the contract would nonetheless have been valid, as the temporary monopoly in the use of a machine granted by an exclusive license is entirely lawful. No monopoly in non-container glassware was, however, created in Corning by the 1922 Glass Contract.

Corning is adjudged by the court to have monopolized the manufacture of laboratory, electrical, paste-mold, signal, optical, ovenware, chemical-resistant and heat-resistant ware, bulbs, tubing and cane (Judgment, §5, R. X-7659).

This conclusion is apparently based upon the court's finding 62, which states:

> "The *result* of the enforcement of the terms of the Glass Contract (1922) *has been to create in Corning a monopolistic and dominating position* in the United States with respect to the manufacture and distribution of heat resistant and chemical resistant ware, ovenware, tubing and cane and bulbs."* (R. X-7291)

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* It will be noted that Section 5 of the judgment goes considerably further than this finding in that it includes, besides the products named in finding 62, laboratory, electrical, paste-mold, signal and optical ware.

Similarly, the court states in its opinion (p. 25) that the result of the agreements "was to give Corning the power to exclude all others from Corning's fields."

The case against Corning as an illegal monopoly in the manufacture of non-container ware is not grounded upon any factual appraisal of the competitive conditions in the non-container industry, but upon the assumption that the exclusive license granted Corning by Hartford and the machinery patent rights which Corning received thereunder automatically conferred on Corning a monopoly of non-container ware.

The effect of the 1922 Glass Contract was not such as to give Corning a monopoly of non-container ware in general, or of any one of the non-container products specified as monopolized in Section 5 of the judgment.

Non-container ware in general

The court makes the following statement in the opinion:

> "Of course, there was more than one manufacturer in practically every line of ware except the non-container field belonging to Corning." (p. 104)

This statement is contrary to the allegations of the complaint. Paragraph 189 (R. I-54) states that sales of pressed and blown,* or non-container glassware, in 1937 exceeded $85,000,000. In Paragraph 191 (R. I-55) it is alleged that in the same year Corning's total sales amounted to only $19,465,185. Thus by the complaint itself Corning is shown to have less than 23% of the sales of the non-container industry.

Further, we call attention to a compilation prepared by the Bureau of the Census of detailed statistics relating to the glass industries for the year 1939 (Sixteenth Decen-

* It is clear that the Government meant the term to describe the non-container industry (Complaint, Par. 29, R. I-9).

nial Census) (Ex. C-5668, R. XXVI-15389). For the purposes of the Census, glass-making in general was divided into four separate industries as follows: (1) Flat Glass; (2) Glass Containers; (3) Tableware, Pressed or Blown Glass, and Glassware not Elsewhere Classified; (4) Mirrors and Other Glass Products Made of Purchased Glass.

The following tabulation has been prepared from that section of the Census which relates to classification (3) above (R. XXVI-15396, 15403, Tables 4 and 5):*

Product	No. of Establishments**	Value of Products
Machine-made (automatic) tableware, pressed or blown	42	$28,366,098
Hand-made tableware	67	11,655,462
Lighting glassware (pressed and blown):		
Shades, globes, reflectors, etc.	33	9,165,733
Lamp chimneys	14	817,489
Other lighting glassware, including electric-light bulbs and oil lamps	19	10,980,009
Lenses	13	2,116,938
Technical, scientific, and industrial glass (pressed and blown):		
Tubing	9	4,727,415
Insulators	7	496,594
Other	18***	4,728,690
Pressed and blown glassware (including glass cooking ware or ovenware) not specified above	51	19,079,573
		$92,654,818

* Most of the kinds of glassware that Corning makes, and in connection with which it is adjudged to have acquired a monopoly, are encompassed in this classification.

** Corning has only five plants for all lines of ware (R. III-1681). There were 115 different "establishments" in this industry in 1939 (Ex. C-5668, R. XXVI-15402). The Census defines "establishment" as a single plant or factory having products valued at $5,000 or more (*ibid*, R. XXVI-15391).

*** In addition there are 56 establishments, having products valued at $2,798,772, listed under the heading "Scientific—apparatus glass (for laboratories, hospitals, druggists, etc.)" in the industry classification "Mirrors and Other Glass Products Made of Purchased Glass" (Ex. C-5668, R. XXVI-15408).

Unprecisely correlated as this tabulation is to the vocabulary of the classifications of non-container ware adopted by the court, it is sufficiently descriptive and inclusive to negative the statement of the court that Corning was the only manufacturer in the entire non-container industry.

The confusion of the non-container with the container industry by the court

The confusion of the court in holding that Corning has a monopoly of non-container glassware lies in blurring the distinction between the container industry and the non-container industry; in speaking of the two separate industries as one industry engaged in the manufacture of "glassware"; and in treating evidence applicable to one as equally applicable to the other. The language of the court repeatedly reflects this confusion.

Thus the court states (Opinion, p. 7) that all of the corporate defendants are members of the Glass Container Association, although Corning and Empire never were (Ex. 1372, R. XXI-13948A). The activities of the Association had nothing to do with the non-container industry, but with statistics and other matters confined to the container industry (R. V-3475-6).

Again, in discussing the statistics introduced into evidence with respect to the use of Hartford machines in the container industry, the opinion seems to blanket the non-container industry as well by talking in terms of *glassware* rather than *containers*:

> "At the time the complaint was filed in December, 1939, there were only four small companies engaged in the manufacture of *glassware* who were not under license and lease from Hartford, representing less than 4% of the total production in *the industry.*" (p. 12)

• • • • • •

> "This whole system of purchases, agreements and mergers has resulted in the situation where less than 6% of the total production of *glassware* on feeders is on feeders not owned or controlled by Hartford, and this represents less than 4% of the *total production* on all types of machinery." (p. 15)

Finding 494 (R. X-7375) clearly shows that the foregoing statistics are confined to the container industry.

The same over-generalization through the use of the terms "glassware" and "the industry" persists throughout the opinion, findings, and judgment.

As a part of the container case, the Government stated that Hartford machinery is the best glass-making machinery (Stip., R. VI-4467).

It was apparently assumed by the court from this that Hartford's patents constituted a monopoly of patents on machinery for the *non-container* field, and that the exclusive license running to Corning to use this machinery for certain types of non-container ware automatically resulted in establishing a monopoly in *non-container ware* in Corning. This is not based on the record.

In the complex and varied non-container industry it has not been proved, because it cannot be proved, that the exclusive rights to Hartford machines bring about general monopoly or dominance, as an examination of the conditions in the particular divisions of ware in which Corning was licensed referred to in the judgment will show.

Laboratory, electrical and paste-mold ware

The court, in including the broad fields of ordinary laboratory, electrical and paste-mold ware in Section 5 of the judgment (R. X-7659), seems to have overlooked the fact that in these fields Corning received only a *non-exclusive* license (Finding 53, R. X-7289).

Obviously, no power to exclude others was derived from the non-exclusive license under the 1922 Glass Contract in these fields of ware. In these broad fields Hartford issued four licenses for paste-mold ware, four for electrical glassware, and three for lighting glassware to others than Corning (Ex. H-5750, R. XXVII-15436). Moreover, it does not appear what proportion of these products is made by other means.

Consequently, the inclusion of these three types of ware—laboratory, paste-mold and electrical ware— in Section 5 of the judgment is clearly erroneous.

Signal and optical ware

Signal and optical ware are nowhere defined in the complaint, opinion, findings of fact, or judgment. The record does not show what kind of or how much optical and signal ware Corning makes; how much other manufacturers make of such ware; or how such ware is produced. The record conspicuously does not show that any of the signal and optical ware made by Corning is made on Hartford machines. The record *does* show that Hartford has licensed its machines to others than Corning, with its consent, for the manufacture of certain types of both signal and optical ware (Finding 60, R. X-7290).

The adjudication of monopoly of signal and optical ware not only has no support in the record but is also inconsistent with facts of which this Court can take judicial notice. In May, 1940, the Department of Justice obtained an indictment against "the manufacturers of 95% of all optical lenses in the United States"; these manufacturers did not include Corning.* It also brought a civil proceeding in September, 1940, against manufacturers and wholesalers of "optical goods"—not including Corning—who

* Department of Justice release of May 28, 1940.

were said to be "able to dominate the entire industry because they control 60 percent of the manufacturing business and 70 percent of the wholesale business."*

Obviously there is no substance to the charge that Corning acquired any monopoly of signal or optical ware by reason of the 1922 Glass Contract.

Bulbs

In the case of bulbs, one of Corning's principal products, the record affirmatively shows that Corning's position in the industry is not due to the exclusive license received through the 1922 Glass Contract but to its own development, the "ribbon" machine, which is far more efficient than any other.

The only Hartford patent having any bearing on the "ribbon" machine was the Howard auto-blow patent, which was claimed by Hartford to read on this machine. Corning, however, was advised by counsel that the "ribbon" machine did not infringe the patent (p. 17, *supra*).

The Howard auto-blow patent did not disclose a commercially useful machine (R. VII-4784, 4809-10, VI-4453). No one by obtaining rights under the Howard auto-blow patent could make a bulb, and Corning's exclusive license under the patent by virtue of the 1922 Glass Contract thus had no affirmative effect. Counsel for the Government specifically stated during the course of the trial that it was not claimed that there was any combination of patents involving the "ribbon" machine (p. 24, *supra;* R. VII-5105).

Tubing and cane

Corning is a producer of glass tubing of all kinds and the only producer of electrical tubing for sale (R. III-1706). Corning and other tubing manufacturers have used the

* Department of Justice release of September 16, 1940.

Danner machine for a number of years for the production of certain kinds of tubing. The effect of the 1922 Glass Contract is confined to the fact that Corning thereby acquired rights to the Peiler punty patent, which issued in 1926 and expired in 1943 and which included claims infringed by the Danner machine, the patent on which expired in 1934.

Completely aside from the 1922 Glass Contract, it would have been entirely proper for Corning and the other licensees under the Danner machine patent to have acquired rights from Hartford to avoid the block to the use of the Danner machine occasioned by the issuance of the Peiler punty patent.

Further, the record shows none of the facts necessary to prove that the right to use the Danner machine brought with it a monopoly of the manufacture of tubing. The record does not show either that all tubing is made by machine, that only machine-made tubing is commercially competitive, or that the Danner machine is the only commercially competitive tube-drawing machine. And the record does show that Corning was not the only manufacturer of tubing that used the Danner machine (R. III-1706-7).

The reason the record does not show the extent to which different kinds of tubing are made on various machines and also by hand arises from the concentration of the whole case upon the container industry. Counsel for the Government specifically stated that the evidence as to tubing was introduced for the sole purpose of proving that rights to a patent, which might have been useful in the manufacture of containers, had been transferred to Corning by Hartford (R. III-1702-3). The transfer referred to was the transfer that took place upon the cancellation of the 1922 Glass Contract.

All patents on the Danner tubing machine have now expired.

Heat-resistant ware

The one non-container product with respect to which the complaint specifically charged Corning with having a monopoly was heat-resistant ware (Complaint, Pars. 52 (R. I-17), 226 (R. I-65), and Par. 4 (R. I-68) of the prayer for relief). As we have already pointed out, Corning developed special heat-resistant and chemical-resistant glass compositions in its own laboratories after years of research, and patents covering these compositions were issued to it by the Patent Office in 1919 (R. VII-5100). It was these patents, together with Corning's success in establishing a new market for cooking utensils made of glass, that brought about Corning's position in the manufacture of heat-resistant glass.

As shown in Point I, it was entirely proper for Corning to obtain an exclusive right to the use of Hartford machines for the manufacture of heat-resistant glass, even though that license operated to prevent others from using the same machines. The fact so heavily relied upon by the Government and the District Court—that the patent on heat-resistant glass and the patents on Hartford machines had different expiration dates—is of no legal significance.

The Government relies upon the unproven assumption that Hartford machines were capable of conferring a monopoly of heat-resistant ware. The record affirmatively shows that only 30% of Corning's heat-resistant ware is made on Hartford feeders (R. II-1469).

The best evidence put forth by the Government to support its charge that Corning acquired a monopoly of heat-resistant ware through its exclusive right to Hartford machines was the statement by Mr. I. J. Collins of Anchor-Hocking that his company was unable successfully to launch a competing line of ovenware without the use of those ma-

chines (R. IV-2997-8). However, this statement must be evaluated in the light of the fact that the McKee Glass Company was contemporaneously manufacturing heat-resistant ware automatically without the benefit of Hartford machines (R. V-3623-4, VIII-6107-8).

POINT III.

Any charge of conspiracy against Corning or Empire is without foundation.

The Department of Justice in its complaint charged all the leading concerns in the glass container industry, and Corning and Empire, the only defendants in the non-container industry, with violating the anti-trust laws not only in individual transactions but through general conspiracy. The Department, however, appears never to have been very clear as to just what constituted this conspiracy, and the District Court's findings on the subject repeat the Department's uncertainty. After detailed enumerations of the terms and alleged effects of the 1916 and 1922 agreements (Findings 28-35, R. X-7283-5; Findings 46-59, R. X-7287-90), the court found as to each agreement in identical terms that it was "a part of the general conspiracy to control and dominate the industry" (Findings 36, 64, R. X-7285, 7291). Neither of these findings cites or refers to any documents or testimony.

In Point I we have demonstrated the propriety of the 1916 and 1922 agreements as normal and legitimate interchanges of patent rights. The agreements cannot be made illegal merely by the application of the term "conspiracy", which is apparently all the court did in findings 36 and 64 (R. X-7285, 7291).

If those agreements be legal, it is not perceived how the intent to enforce them in accordance with their terms,

and to derive the benefits that would flow therefrom, can be an illegal intent or how it can open the agreements to attack on a thesis of conspiracy.

Of course when Corning or Empire sought and obtained exclusive licenses under Hartford patents in 1916 and 1922 for the manufacture of non-container glassware, they intended to exclude others from the possession of such a license. There is no doubt that Corning desired to obtain whatever position in the non-container industry it could secure by means of the exclusive use of its and Hartford's patents. It is not contended that the parties did not intend the normal effects of those agreements. Neither the agreements, their effects, nor the purpose of the parties concerned constitute, however, any conspiracy on the part of Corning or Empire.

For example, the court quotes (Opinion, p. 22), as showing the alleged monopolistic intention of Corning in entering into the 1922 Glass Contract, the statement (Ex. 1988, R. XXIII-14590-1) made by Dorsey in 1921 that the 1916 agreement had two possible purposes, one of which was to prevent the use of the Hartford machines by others in the manufacture of baking ware, irrespective of the quality of the glass, and the second was to let Corning use Hartford inventions in baking ware, milk bottles, etc., if it should discover a new glass not containing boric oxide, but still usable. No doubt the purposes were as stated by Dorsey. The exclusion of others from the field is the normal purpose and intent of an exclusive license. But it should be self-evident that the acquisition of an exclusive license does not constitute conspiracy.

Great reliance is placed in the opinion, to show an illegal purpose, on memoranda written by Herbert Knox Smith of Hartford in 1930 and 1931 concerning his negotiations with

Judge Green of Corning with respect to their proposed revision of the 1922 Glass Contract.*

The court correctly states that the negotiations referred to in these memoranda "were had with a view towards revising the contractual relationship between the two companies" (Opinion, p. 23). But it fails to state, as was the fact, that this proposed revision of the Glass Contract of 1922 was never carried out. It is academic to speculate whether such changes, had they been made in the agreement, might have made it illegal. The conversations came to nothing.

We have affirmatively shown, we submit, that the parties to the 1916 and 1922 agreements were motivated only by legitimate business reasons in entering into those agreements, and we submit further that the Government has failed to show any improper motives, much less a conspiratorial design, in connection with those agreements. There remains only the question of Corning's acts that fell outside the scope of the agreements.

Subsequent patent settlements by Hartford

Corning was not a party to any of the various agreements and patent settlements entered into by Hartford with others subsequent to the 1922 Glass Contract. These agreements are dealt with in the briefs of Hartford and the various other parties to them. We shall not repeat here the argument in those briefs that these agreements had legitimate purposes and were entirely legal and proper under the patent and anti-trust laws.

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* These memoranda were admitted by the court only for the purpose of showing the state of Mr. Smith's mind. The court expressly ruled that they would have no binding effect upon Corning (R. II-1225-32). Therefore, it was error for the court to rely upon these exhibits (Op., pp. 23-25) to show an illegal conspiracy upon the part of Corning.

The District Court found that Corning and Empire actively participated "in the formulation of the policies and major decisions of Hartford" (Finding 56, R. X-7289). The basic relations between Hartford and Corning were contractual in character and were embraced by the 1922 Glass Contract. The stockholdings of certain Corning officials through Empire in Hartford, which gave them representation on Hartford's board, do not in and of themselves tie Corning into the dealings of Hartford. It has not been shown by the Government below that those individuals ever participated in any of the allegedly illegal post-1922 transactions other than as directors of Hartford. The post-1922 transactions of Hartford were principally important in the container field.

The finding of the District Court that "Corning participated in negotiations leading to the Hartford-Owens agreement of 1924" is not supported by the record (Finding 102, R. X-7296). The evidence relied upon by the court refers to negotiations prior to the formal execution of the Formation Agreement. Hartford-Fairmont and Empire had agreed in substance upon the formation of Hartford in 1920. Therefore Hartford-Fairmont was interested in keeping the directors of Empire, who were about to become fellow directors of Hartford, fully informed as to the progress of the negotiations with Owens. On the other side, the Empire directors were concerned with the effect of the Owens agreement on their substantial investment in the new company.

The alleged control of Hartford by Corning

It is not the purpose of this brief to argue the legality of the action taken in the container field by Hartford. The District Court, however, found that "the Corning interests" had the power to exercise working control over Hartford (Finding 56, R. X-7289-90).

Corning owned no stock either in Empire or in Hartford. The court's finding is based upon the fact that Empire (which was controlled by certain stockholders of Corning) held approximately 43% of the outstanding stock of Hartford, which it had received in 1922 in return for the transfer of its assets—and that, as a result, four of the eight or nine directors of Hartford were also directors of Empire and Corning. These facts are not denied. But they do not prove control of Hartford by Corning—or make Corning responsible for Hartford's activities in the container industry.

Although it is not disputed that Empire desired a voice in the policies of Hartford for the protection of its very substantial investment, nevertheless Empire did not seek "control" of Hartford. That this was Empire's position in regard to Hartford is clearly demonstrated by Exhibit 676 (R. XX-13348), a letter from Mr. Falck, the president of Empire, in which he states on page 5 (R. XX-13351):

> "It was suggested at our conference last week that I state as part of our proposition that we would like to have joint control for a period of years, to be effected by having equal representation on the board of directors or in some other suitable manner. We concluded, however, not to make this request as we have entire confidence in you and your group. We will, however, wish to participate actively in formulation of policies and major decisions and I assume from what you said to me that this will be your desire."

Furthermore in Exhibit C-5049 (R. XXIV-14745), a letter dated June 30, 1927, Mr. Falck wrote:

> "We (Empire) have always • • • expected • • • to have the management of the corporation directed by the small Hartford group, • • • We (Empire) do not desire to acquire voting control and if you

offered us today enough of the Monongah stock to give us actual control we would not take it."

The contention that Corning controlled or dominated Hartford hardly squares with the fact that Corning was unable to obtain a license from Hartford for the manufacture of containers (Finding 463, R. X-7371).

POINT IV.

The drastic and unprecedented provisions of the judgment have no justifiable application to Corning.*

The briefs submitted on behalf of Hartford and other container appellants discuss in great detail the lack of precedent for and the substantive defects in the judgment entered by the District Court. In order to avoid burdening this Court by repetition, we shall confine our consideration of the judgment to its applicability to and its particular impact on the business and operations of Corning, the sole non-container glassware manufacturer in the case.

The 1916 agreement and the 1922 Glass Contract have been cancelled—there is no question of their reinstatement.

The 1916 agreement and the 1922 Glass Contract were cancelled by the parties, during the settlement negotiations, in September, 1940 (Ex. H-5030, R. XIII-9540). We submit that we have demonstrated in this brief that the two agreements were legal and proper in all respects. But, regardless of whether this Court agrees with us or with the lower

* Empire was dissolved before the trial of this case started (Finding 6, R. X-7278). Since all the individual appellants associated with Empire are included among the individual appellants associated with Corning, our discussion relative to the judgment can be limited to Corning and the individual appellants associated therewith.

court on the question of the legality of these agreements, the fact is that they have been cancelled. Corning's exclusive license from Hartford has been done away with, and Hartford licensees are no longer restricted in the types of ware they produce on Hartford machines, having been notified on October 8, 1940 that all restrictions had been removed (R. I-435, 441-3).

The judgment, however, goes far beyond cancelling the 1916 and 1922 agreements and enjoining their renewal. It applies to Corning and the individuals associated with Corning an extremely drastic and complicated series of restrictions and affirmative orders, obviously directed primarily at the alleged illegal aggregation of patents and the license and lease system of the container industry.

Apart from whether or not these drastic provisions can be supported generally, they are wholly inappropriate as applied to Corning.

Perpetual regulation of sale by Corning of all patented products

The judgment severely restricts Corning in normal and usual selling practices, despite the absence in the record of any evidence that Corning ever engaged in discriminatory selling practices.

Section 29(f) of the judgment (R. X-7673) writes for Corning in perpetuity what is, in effect, a new and unrestricted Robinson-Patman Act which covers any product which embodies a patented invention. This provision applies not only to the patented products Corning now makes, but also to all patented products that it may ever make hereafter.

Corning is enjoined from entering into any sales agreement which grants to any vendee of any product (whether it be glass or anything else), which embodies inventions

covered by patents owned or controlled by it, "a preferential position, whether * * * by different provisions of * * * sale, by discounts * * * or by any other means."

We cannot attempt to assay the full implications of this extraordinary provision. On its face it is a private Robinson-Patman Act for the appellants which is not confined to price discriminations and which does not contain the limitations advisedly written into that Act by Congress which make it workable. This provision applies not only to the patented products Corning now makes, but also to all patented products that it may make hereafter.

It is difficult to imagine an organization which manufactures and sells a greater variety of products than does Corning. As has been indicated, these range from the 200-inch telescope lens to electric light bulbs and laboratory equipment. Many of these products have embodied patented inventions.

For some forty years Corning has been the leading glass research organization of the United States (p. 6, *supra*). For several years prior to the trial of this case it expended for research and development approximately $850,000 annually (R. VIII-5584). This figure bears an unusually high ratio (4.4%) to sales of $19,465,185 in 1937 (Finding 80, R. X-7293)*. Many new glass compositions have come out of Corning's laboratory.

If this provision of the judgment becomes effective, Corning will be forced to revise its entire system of sale and distribution of all glassware embodying patents. In some cases a single item of laboratory ware may be sold to school and industrial laboratories, to wholesalers, to

* In 1939 the average ratio of expenditure on research and development to sales in the glass and glassware industry, as found by the Federal Trade Commission, was 0.78%. Federal Trade Commission Industrial Corporation Reports, Summary by Industry Groups, June 30, 1941, p. 23.

various classes of dealers, to retail outlets and to other manufacturers for use in fabricating more elaborate pieces of laboratory equipment. Under the judgment entered by the District Court, Corning will be compelled to sell to all of its various classes of customers at the same identical price. Functional and trade discounts, however sound their basis under the Robinson-Patman Act might be, are abolished. The right to meet competition, protected by the Robinson-Patman Act, is enjoined. Dealers and wholesalers will not be willing to handle products if they can not be given an appropriate discount. The customer who is prepared to buy a thousand gross of a particular item will be quoted the same price as the customer who orders a dozen. The result will be complete rigidity of prices. Corning will not be able to use normal distribution channels or to compete with other manufacturers of non-container ware, who will not be under any similar handicap.

What other pitfalls for a large merchandising organization lurk in the vague, all-inclusive words—"a preferential position * * * by any other means"—it is impossible to tell. This provision has no justification either at law or under the facts of this case.

The compulsory licensing of Corning's present and future machinery patents

The judgment requires Corning to give royalty-free licenses under its existing machinery patents, and even to supply to others blueprints and patterns of the machines which it does not sell but uses only in its own business (§24 (a) and (c), R. X-7667-8).

These provisions go beyond any decision of this Court. It seems clear from the opinion of the District Court (p. 158) that the compulsory royalty-free licensing provi-

sion of the judgment is squarely directed at an allegedly illegal combination of patents in the container industry and Hartford's license and lease system. The provision of the judgment, however, encompasses all patents of Corning (and of all the other defendants) covering all machinery and methods used in the manufacture of glassware, as this term is elaborately defined in Section 1 of the judgment (R. X-7654-5). "Glassware" is defined to include, besides a large number of named products, "all glass products", except for specified exclusions.*

Corning is not shown to have any illegal "aggregation" of patents. Except for the three patents transferred by Hartford to Corning during the settlement negotiations (two of which have since expired), there is no evidence that Corning ever acquired any patent as a result of any of the transactions attacked in this case.

A specific example will demonstrate the inequitable and unjustifiable result of this indiscriminate compulsory licensing.

Corning's Ribbon Machine

Probably the most spectacular and important development that Corning has ever made in the field of glassware machinery is the "ribbon" machine, which was designed for the blowing of bulbs. This machine operates on an entirely different principle from Hartford's suspended charge feeder (Ex. H-5527, R. XIV-10829).

The "ribbon" machine was the result of Corning's own research. It was conceived and developed by, and the patent applications were filed in the names of, two Corning employees: William J. Woods, who was at one time a glass gatherer in the plant, and David E. Gray, who was in charge

* Flat glass, fiberglas, structural glass, glass brick, and products made therefrom.

of the Mechanical Development Department of Corning for many years (R. VII-5104). During the course of the trial below, counsel for the Government stated:

> "We have never claimed any combination of patents involving the ribbon machine, as far as I know." (R. VII-5105)*

In the face of this, we submit that the "ribbon" machine should not be forfeited and ordered to be licensed royalty-free to anyone who chooses to ask for it.

Effect on Corning's research of compulsory licensing of future inventions.

The court dealt with royalty-free licensing of all existing glassware machinery patents of all defendants in a single sentence in the opinion. There is no mention whatsoever in the opinion of the compulsory licensing of all *future* glassware machinery patents, whenever and however acquired, at a rate of royalty to be fixed by the court. Yet this unprecedented provision was written into the judgment (§24(b), R. X-7668).

So long as it continues to do business, Corning is to be compelled to license all of its future patents covering machinery and methods used in the manufacture of glassware to any person who makes application therefor, at a rate of royalty that the court decides to be reasonable. This

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* Before the trial of the present case started, the Government had brought a wholly separate civil suit in the District Court for the District of New Jersey, in January, 1941, against Corning, Empire and a number of others not parties to this suit, alleging, among other things, violations of the Sherman Act with respect to bulbs. During the course of the trial in the *present* case, counsel for the Government asserted:

> "I am not talking about bulbs. *That is another case.* There is another place and another time for that. I am talking about containers involved in this case." (R. VI-4603)

provision of the judgment would cover every device that Corning may invent in the far-distant future. It would cover machines and methods which had nothing to do with anything charged or proved in this case.

Compulsory licensing, even at a reasonable royalty, vitiates the reward which the patentee is granted by the patent laws. Any company would hesitate to make a large investment in the development of an invention if it is to be compelled to license that invention to its competitors at unknown and unpredictable terms. Since each invention is unique, since the amount of the investment varies in each case, and since a particular invention may be more or less valuable to different licensees depending upon the use to which it is to be put, it becomes extremely difficult to fix a reasonable royalty in any given case.

In providing that any dispute with a prospective licensee shall be determined by the court, the judgment sets up a one-sided bargaining arrangement. The applicant for a license has the option to accept or reject the terms set by the court, while the patent owner is bound to accept whatever royalty rate the court may fix if the applicant is satisfied with it.

One further aspect of the compulsory licensing of all future glassware machinery patents may be noted—and that is its impact on the individual appellants. Dr. Arthur L. Day and Dr. Eugene C. Sullivan, who have devoted over thirty years to research in glass and related problems (R. VII-5486, VIII-5582), are required by Section 24 (b) of the judgment (R. X-7668) for the remainder of their lives, *regardless of whether or not they continue to be associated with Corning,* so long as they engage in either the glassware machinery business or the glassware business, to license their *future* glassware machinery patents to all applicants.

It is submitted that this provision constitutes a departure from our principles of individual freedom so shocking as not to require extended comment.

The prohibition of licensing practices, irrespective of whether they illegally restrain competition

The judgment is not confined to the prohibition of the license and lease system practised by Hartford until 1940. It prohibits all limited patent licenses for all time. It prohibits such licenses absolutely—and not when used as part of any illegal combination. It apparently proceeds on the assumption that licensing in limited fields is illegal or likely to jeopardize the public interest. This premise of the court is incorporated in Section 29(a) of the judgment (R. X-7672), which enjoins Corning in perpetuity from issuing any license, including non-exclusive licenses, which directly or indirectly limits or restricts the type or kind of product (whether glassware or any other product whatsoever) which can be produced with or upon machines or equipment or processes embodying patented inventions. Other normal and proper license limitations and restrictions are likewise outlawed by this Section.

This blanket prohibition disregards the propriety of limited licenses, long a common practice in American industry. Limited licenses enable the owner of an invention to realize its by-product value in industries different from that in which he is primarily interested. There is no improper exclusion or restriction in the granting of such a license. *General Talking Pictures Corp.* v. *Western Electric Co.*, 304 U. S. 175, 305 U. S. 124.

No public interest is served in preventing a large research organization, such as Corning, from issuing limited licenses under its own patents for by-product uses to other

industries where they are believed by the purchaser of the right to advance the useful arts in his business. Under the judgment it would be impossible for Corning to issue a limited license of this character and, if it issued any license at all, it would have to throw the patent open to all uses and for all markets.

A further provision incorporated in the complicated wording of Section 29(f) of the judgment (R. X-7673) would prohibit Corning from issuing an exclusive license—and all licenses would have to be at identical terms and rates of royalty. This provision would directly discourage by-product utilization of patents and thus delay the development of new processes. Exclusive licenses have long been common and have been upheld as lawful by this Court:

United States v. *General Electric Co.*, 272 U. S. 476;
Virtue v. *Creamery Package Mfg. Co.*, 227 U. S. 8.

The cancellation of the 1940 agreement

As we have already pointed out, in an effort to settle the case before the trial started, Hartford and Corning entered into an agreement dated September 23, 1940 (Ex. H-5030, R. XIII-9540), by which they cancelled the 1916 agreement and the 1922 Glass Contract. In addition to the cancellation, the agreement provided for the payment by Hartford to Corning of $1,500,000 (later reduced to $1,125,000) in ten annual installments and the transfer to Corning of title to the Howard auto-blow, Peiler punty and Smith re-issue patents (Finding 509, R. X-7378).

The judgment declares unlawful and cancels the agreement of September 23, 1940 (§27, R. X-7670-1); impounds the money received by Corning from Hartford under the agreement and enjoins Hartford from making any further

payments (§45(A), R. X-7683-4); and directs Corning to re-assign to Hartford the three patents (§45(B), R. X-7684). What disposition is to be made of the money impounded is not indicated by the court.

The reason why Corning desired to retain exclusive rights in the three patents upon the cancellation of the 1922 Glass Contract has been referred to in the Statement (pp. 16-20, *supra*).

Two of the three patents have now expired (Findings 66 and 73, R. X-7291-2). The third patent—the Smith reissue patent—reads on a feature of Corning's turret chain machine (Finding 79, R. X-7293; R. VIII-6026). Corning's only interest in the patent, which expires before the patent on the turret chain machine does (Finding 79, R. X-7293; R. VIII-6026), is to prevent the use of its own machine being blocked. If this Court shall conclude that this patent may not be acquired by Corning, it is willing that the patent be dedicated to the public.

The result of the cancellation in 1940 of the 1922 Glass Contract has been that Corning now pays to Hartford substantially increased royalties on such Hartford machines as it uses and will use in the future (R. VIII-5810). These increased royalties were compensated for by Hartford's agreement to pay Corning $1,125,000 in consideration of the cancellation of the 1922 Glass Contract and the relinquishment by Corning of the rights originally bargained for. The agreement to pay this sum was fairly arrived at by the parties after several weeks of negotiation. Corning's right to receive payment from Hartford under the cancellation agreement should not be destroyed and confiscated.

Prohibition against the holding of stock by the individual appellants

The individual appellants associated with Corning (Amory Houghton, Arthur A. Houghton, Jr., Falck, Day, Sullivan, Curtiss and Peden) are enjoined from holding or controlling directly or indirectly any of the stock or evidences of indebtedness of more than one corporation engaged either in the manufacture and sale of glassware or in the manufacture or distribution of glassware machinery or in both (Judgment, §33, R. X-7674-5). So far as appellants Day, Sullivan, Curtiss and Peden are concerned, there is no evidence that they have ever held stock in more than one company engaged in either the glassware business or the glassware machinery business. Further, there is no reason for a blanket injunction of this kind which prohibits all stock holdings regardless of any possible effect or restraint upon competition.

Upon the dissolution of Empire in the early part of 1941, the stock of Hartford held by Empire was distributed among its stockholders. The appellants Amory Houghton, Arthur A. Houghton, Jr. and Alexander D. Falck own Hartford stock, individually and as trustees, and in addition own Corning stock. Section 33 requires these appellants to dispose either of their Corning stock or of their Hartford stock within a period of two years from the effective date of the judgment.

Although it is believed that there is no necessity or justification for this provision of the judgment, the individuals concerned should in no event be required to dispose of their Hartford stock until a market for it can be found and a fair price obtained. To state that the judgment of the lower court in this case has had a drastic effect on the marketability of Hartford stock is to state the obvious.

The unsettled conditions arising from the war, superimposed upon this situation, would make any period for the disposition of the stock shorter than five years inequitable. There is no occasion for penalizing these defendants by requiring a forced sale. If this Court deems it necessary, the individual defendants involved can be ordered to trustee the stock pending its disposition.

Furthermore, Section 36(A) of the judgment prohibits each corporation and each individual defendant associated therewith from holding stock in any "other" defendant corporation, except that an individual defendant can hold stock of the defendant corporation of which he is an officer or director. Literally construed, this might mean that no individual defendant could hold stock even in one corporate defendant unless he is also an officer or director of that corporate defendant (Judgment §36, R. X-7677).

Section 36 is even more stringent in its application than Section 33 because it would require the individual defendants named above to dispose of their stock without allowing the two-year period provided for in Section 33. Apparently it would require the immediate disposition of such stock. This raises—*a fortiori*—the same considerations that have been referred to above with respect to Section 33.

Additional extreme and unworkable provisions of the judgment

Within the scope of this brief it is not possible to discuss fully all of the numerous provisions of the judgment which impinge on Corning and the individuals associated therewith. In view of the fact that these provisions will be discussed fully by other defendants in the related appeals, we shall not burden the Court with a duplication of that discussion.

We should, however, like to point out very briefly a few provisions—in addition to those already referred to—which seem to us of particular importance:

(1) No agreement of any kind can be entered into between Corning and any of the other defendants, corporate or individual, except with the approval of the court on ten days' notice to the Attorney-General (Judgment, §31, R. X-7673-4).

(2) All license agreements required under present and future patents of Corning must be approved by the court on ten days' notice to the Attorney-General (Judgment, §31, R. X-7673-4).

(3) Corning and the individual defendants are forbidden to acquire or hold stock, bonds or assets of any other company engaged in the glassware manufacturing business, or in the glassware machinery business—even though such acquisition would be without effect upon competitive conditions (Judgment, §36(B), R. X-7677-8).

(4) Corning and the individual defendants are subjected to the novel and complicated injunctions of Section 40 of the judgment (R. X-7680-1), which are directed at trade association activities, though Corning never was a member of the Glass Container Association.

Conclusion

It is respectfully submitted that:

(1) The 1916 agreement, the 1922 Glass Contract and the Formation Agreement were lawful and proper.

(2) The charge of conspiracy against Corning, Empire and the individuals associated therewith is without foundation.

(3) The provisions of the judgment as applied to Corning and the individuals associated therewith are without warrant in fact or in law.

(4) The judgment of the District Court as to Corning, Empire and the individuals associated therewith should be reversed.

Respectfully submitted,

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Appendix A

Statutes Involved.

United States Constitution
Article 1, Section 8:

"The Congress shall have power * * *

* * * * * * *

"To promote the Progress of Science and useful Arts, *by* securing for limited Times to Authors and Inventors the *exclusive* Right to their respective Writings and Discoveries; * * *."

United States Code, Title 35,

Section 40 (Act of May 23, 1930, c. 312, Sec. 1, 46 Stat. 376):

"Every patent shall contain * * * a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the *exclusive* right to make, use, and vend the invention or discovery * * *."

Section 47 (Act of March 3, 1897, c. 391, Sec. 5, 29 Stat. 693, as amended by 42 Stat. 391):

"Assignments of patents; * * *

Every patent or any interest therein shall be assignable in law by an instrument in writing, and the patentee or his assigns or legal representatives may in like manner grant and convey an exclusive right under his patent to the whole or any specified part of the United States."

The Sherman Act of July 2, 1890

Sections 1, 2 and 4 (Act of July 2, 1890, c. 647, Secs. 1, 2 and 4, 26 Stat. 209, as amended by 36 Stat. 1167 and 50 Stat. 693, 15 U. S. C. Secs. 1, 2 and 4):

"Sec. 1. Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal * * *. Every person who shall make any such contract or engage in any such combination or conspiracy, hereby declared to be illegal shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding $5,000, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court."

"Sec. 2. Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court."

"Sec. 4. The several circuit courts of the United States are hereby invested with jurisdiction to prevent and restrain violations of this act; and it shall be the duty of the several district attorneys of the United States, in their respective districts, under the direction of the Attorney General, to institute proceedings in equity to prevent and restrain such violations. Such proceedings may be by way of petition setting forth the case and praying that such violation shall be enjoined or otherwise prohibited. When the parties complained of shall have been duly notified of such petition the court shall proceed, as soon as may be to the hearing and determination of the case; and pending such petition and before final decree, the court may at any time make such temporary restraining order or prohibition as shall be deemed just in the premises."

Appendix B.

Exhibits Cited

Exhibit Number	Record Page Offered in Evidence	Record Page Admitted in Evidence	Printed in Record
1	I 642	I 736	XII 8598
7	I 666	I 666	XVIII 12371
14	I 680	I 680	XVIII 12389
16	I 695	I 696	XVII 11943
19	I 697	I 698	XII 8606A
676	III 1685	III 1685	XX 13348
973	IV 2572	IV 2573	XI 7984
1372	V 3476	V 3476	XXI 13948A
1568	VI 3941	VI 3941	XI 8037
1583	VI 3941	VI 3941	XI 8095
1681	VI 3942	VI 3943	XXII 1416
1988	VIII 6143	VIII 6143	XXIII 14590
H-5004	II 1430	II 1430	XXIV 14686
H-5029	II 1477	II 1477	XIII 9539
H-5030	II 1477	II 1477	XIII 9540
C-5048	III 1759	III 1759	XXIV 14742
C-5049	III 1763	III 1763	XXIV 14745
H-5223	V 3817	V 3817	XXIV 14894
H-5393	VII 4868	VII 4868	XXV 15087
H-5527	VII 5104	VII 5109	XIV 10829
C-5530	VII 5110	VII 5113	XXVI 15281
C-5532	VII 5110	VII 5113	XXVI 15289
C-5652	VII 5508	VII 5508	XXVI 15355
C-5653	VII 5508	VII 5508	XXVI 15357
C-5656	VII 5511	VII 5511	XXVI 15360
C-5666	VII 5541	VII 5541	XXVI 15374
C-5668	VII 5547	VII 5547	XXVI 15389
H-5750	VIII 5733	VIII 5733	XXVII 15436
H-6113	IX 6694	IX 6695	XXVIII 16256
C-6119	IX 6731	IX 6749	XII 8569